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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,076	10/28/2003	Robert B. Eveleigh	181-0041	4175

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INDIANAPOLIS, IN 46204

EXAMINER

HOOK, JAMES F

ART UNIT PAPER NUMBER

3754

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/695,076	<b>Applicant(s)</b> EVELEIGH, ROBERT B.	
	<b>Examiner</b> James F. Hook	<b>Art Unit</b> 3754	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on 11 April 2005.
- 2a)  This action is **FINAL**.
- 2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 28-42 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 28-42 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a)  All    b)  Some \*    c)  None of:
      - 1.  Certified copies of the priority documents have been received.
      - 2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      - 3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)
- 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4)  Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5)  Notice of Informal Patent Application (PTO-152)
- 6)  Other: \_\_\_\_\_.

### **DETAILED ACTION**

Receipt is acknowledged of the Terminal disclaimer filed March 1, 2005 which was deemed acceptable and obviates the double patenting rejection which has been overcome in light of the acceptable Terminal disclaimer.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 35 and 39 are rejected under 35 U.S.C. 102(b) as being as anticipated by Matsumoto. The patent to Matsumoto discloses a baffle for mixing or agitation where the use of such in a mixing dome housing is merely intended use, comprising a baffle 24 with leading upstream edge seen in figure 1, where flow comes from inlet 21 making that the upstream end, having a surface tapering into the housing, another downstream surface wider than the upstream surface and extending further into the interior of the housing, where multiple baffles can be provided, where the baffle can be seen to an angle thereby providing the baffles with upstream and downstream portions, where such is used to replace baffles of the prior art that were provided perpendicular to flow as seen in figure 1.

#### ***Claim Rejections - 35 USC § 103***

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 28-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kline (496) in view of King (967). The patent to Kline discloses the recited thermostatically controlled mixing valve comprising a thermostat 26, hot and cold fluid inlets 11,12, a control valve 14, a housing 32 having an inner wall provided with at least one baffle 31 of curved shapes, where there can be more than one baffle provided including up to three, and the baffles can be seen in figures 3-5 to have a surface are about one half the cross sectional area of the housing, and are formed of a structure where there is a larger surface portion and a surface portion that tapers toward the housing. The patent to Kline discloses all of the recited structure with the exception of forming the baffles at an angle such that there is a leading upstream surface portion and a trailing downstream surface portion, having the baffle run 210 degrees from upstream to downstream surface portions, however such is considered a mere choice of mechanical expedients, and forming the baffle in a paisley shape which is considered an obvious choice of mechanical design to alter the shape. It would have been obvious to one skilled in the art to modify the baffle in Kline to run 210 degrees from upstream to downstream surface portions as such would only require routine

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experimentation by one skilled in the art to arrive at optimum working values and such would provide for more mixing if the baffle were turned more. It is considered an obvious choice of mechanical design to form the baffle of any shape as such is merely a choice of mechanical design and it would have been obvious to one skilled in the art to modify the baffles in Kline to be of any shape as such would only require routine experimentation to change the shape to change the flow profile to meet the needs of the user as such is merely a change in mechanical design requiring only routine experimentation. The patent to King discloses a baffle for mixing or agitation where the use of such in a mixing dome housing is merely intended use, comprising a leading upstream edge seen in figures 7,9 having a surface tapering into the housing, another downstream surface wider than the upstream surface and extending further into the interior of the housing, where multiple baffles can be provided, and an arcuate portion connecting the upstream and downstream surface portions, where the baffle can be seen to an angle thereby providing the baffles with upstream and downstream portions, where such is used to replace baffles of the prior art that were provided perpendicular to flow as seen in figure 1. It would have been obvious to one skilled in the art to modify the baffles in Kline to be formed with an upstream surface portion that tapers into the housing and a downstream surface portion that is wider than the upstream edge as suggested by King as such would provide for better mixing of the elements and thereby insure for a more mixed output as such is an improvement over the straight baffles of the prior art and would thereby save money by improving efficiency.

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Claims 28-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kline (496) in view of Matsumoto. The patent to Kline discloses the recited thermostatically controlled mixing valve comprising a thermostat 26, hot and cold fluid inlets 11,12, a control valve 14, a housing 32 having an inner wall provided with at least one baffle 31 of curved shapes, where there can be more than one baffle provided including up to three, and the baffles can be seen in figures 3-5 to have a surface area about one half the cross sectional area of the housing, and are formed of a structure where there is a larger surface portion and a surface portion that tapers toward the housing. The patent to Kline discloses all of the recited structure with the exception of forming the baffles at an angle such that there is a leading upstream surface portion and a trailing downstream surface portion, having the baffle run 210 degrees from upstream to downstream surface portions, however such is considered a mere choice of mechanical expedients, and forming the baffle in a paisley shape which is considered an obvious choice of mechanical design to alter the shape. It would have been obvious to one skilled in the art to modify the baffle in Kline to run 210 degrees from upstream to downstream surface portions as such would only require routine experimentation by one skilled in the art to arrive at optimum working values and such would provide for more mixing if the baffle were turned more. It is considered an obvious choice of mechanical design to form the baffle of any shape as such is merely a choice of mechanical design and it would have been obvious to one skilled in the art to modify the baffles in Kline to be of any shape as such would only require routine experimentation to change the shape to change the flow profile to meet the needs of the

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user as such is merely a change in mechanical design requiring only routine experimentation. The patent to Matsumoto discloses a baffle for mixing or agitation where the use of such in a mixing dome housing is merely intended use, comprising a baffle 24 with leading upstream edge seen in figure 1, where flow comes from inlet 21 making that the upstream end, having a surface tapering into the housing, another downstream surface wider than the upstream surface and extending further into the interior of the housing, where multiple baffles can be provided, where the baffle can be seen to have an angle thereby providing the baffles with upstream and downstream portions, where such is used to replace baffles of the prior art. It would have been obvious to one skilled in the art to modify the baffles in Kline to be formed with an upstream surface portion that tapers into the housing and a downstream surface portion that is wider than the upstream edge as suggested by Matsumoto as such would provide for better flow through the device which would lead to better mixing due to the spiral flow induced, thereby saving money by improving efficiency.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 28-42 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

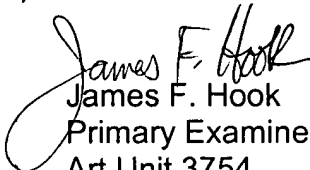
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Lamminen, Rao, Chyou, and Althaus disclosing state of the art baffles.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (571) 272-4906. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
James F. Hook  
Primary Examiner  
Art Unit 3754

JFH